

## Reshaping Education in the Post COVID-19 Pandemic in Africa

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### ABSTRACT

*The emergence of the coronavirus diseases (COVID-19) pandemic has upended the daily lives of people around the world. The COVID-19 pandemic is among the big disasters which in turn caused several changes personally and professionally in human life across the globe. Among of these changes, the education sector has been confronted to continue with face to face teaching and learning which has seemed to be unsafe for educators and students in a physical classroom. Consequently, the imposition of several mitigation measures based on social distancing and lockdown have led to the application of distance learning as a possible way for the learners to continue learning. Nevertheless, as schools reopen for face to face learning, these changes may have no value to education and may vanish. To ensure responsive education, the continuing need for education improvement must be proactive and critical in a way that prepares education to address issues and challenges in the society. This theoretical paper discusses how the COVID-19 pandemic has shaped a unique opportunity for educational changes. These changes may have been intended to happen even before the onset of the COVID-19 pandemic but received little attention of practice. Furthermore, this paper highlights the major changes that education should make to positively influence teaching and learning in the age of post COVID-19. These changes include a curriculum that is developmental, effective and personalized; leadership, policy, and pedagogy that is learner- centered, reliable, purposeful, inquiry-based, and experiential; and delivery of education that take advantage on the strength of both asynchronous and synchronous learning.*

**Keywords:** *Innovative education, curriculum development, pedagogy, COVID-19, online learning, Reshaping Education, Post COVID-19 Pandemic, Educational Leadership*

### 1. INTRODUCTION

Education has been understood for many thousands of years as a tool which prepare a person for life. Until these days, education remains to be a field of concern on the planet. Several professionals from different learning institutions across the world have been tirelessly trying to improve education in the way that prepare learners to solve issues and challenges facing the society. From this standing point, there have been significant changes in the teaching and learning process in the twenty-first century. The old methods have been receiving little attention and the new pedagogies of teaching and learning are being implemented to enable learners and their instructors attain the intended goal of education in the time of globalization.

Education is viewed as the practice of freedom by which women and men deal critically and creatively with reality and discovers how to participate in the transformation of the world (Freire, 1993; Pacho, 2013). This demonstrates the value of education in today's world and the need for change and development. Freire, 1993, advocates for a problem-solving approach to education and a progressive teaching and learning that give emphasis to new discoveries as possible ways for acquiring knowledges for solving problems that exist on this ever changing world. The growing variety of literature clearly point out that the field of education has not remained firm and static, it has been adopting several changes from time to time. The changes have been triggered by the advancement in innovation, research, social changes, and adversities that have affected human life in many ways. The COVID-19 pandemic is among the big catastrophes which in turn brought several challenges in human life across the world (WHO, 2020; United Nations, 2020). This pandemic has forced several countries across the globe to close learning institutions ranging from lower schools to higher learning institutions (Paschal and Mkulu, 2020; Batty, 2020). In his era of COVID-19, both developed and developing countries must respond creatively and quickly to alleviate the negative effects caused by adapting to remote education. The remote education has been practiced asynchronously and synchronously through radio, television, Zoom, WhatsApp, Email correspondences, and YouTube channels (Armstrong, Lugano, and Hawi, 2020). Similarly, many learning institutions adapted online methods of delivering education through zoom meeting, skype, google classroom, online YouTube videos among other online tool (Paschal and Mkulu, 2020; George, 2020). Even though remote education has faced several challenges, several literatures for example the study conducted by have shown that the pedagogies of distance learning have had a great support in teaching and learning process(Paschal and Mkulu 2020; Sun and Chen, 2016; Tagoe, 2012).

However, the several educational changes that followed in the early time as the result of the onset of the COVID-19 are not indispensable changes that education desires to make in the world of post COVID-19 pandemic. The changes were invented as a way forward to help students thrive during the COVID-19 crisis. One of the key proactive measures to the spread of the COVID-19 were closure of educational institutions, lockdowns and social distancing in many countries like Italy, Germany, Canada, United States of America, India, Kenya, Uganda, Rwanda, South Africa, Rwanda (Paschal, and Mkulu, 2020). This led to the rise of online teaching and learning to help students continue learning while at home. In this regard, the changes that took place during the pandemic were meant to respond quickly to the need for the educators and learners' continual teaching and learning rather than to rethink education. Similarly, some of the innovation to teaching and learning were intended for a short-term purpose rather than long-term.

It is important to note that changes always exist, but the pandemic has just accelerated it. The COVID-19 has not only brought negative effects to the education sector but also has stimulated possibilities and desire for the real educational changes. The COVID-19 hit many industries across the world, and it affected many learning institutions resulting to the suspension of face to face learning by closing of schools. From this notable point, the effects of the pandemic have provided the irreplaceable opportunities for policy makers, educators, and learners come together to rethink education by planning to develop evolving education needed to meet the need of the

society in the time of post COVID-19 rather than continuing with the fixed and old-fashioned model of teaching and learning that countries across the globe have been deriving.

Different professionals across the globe have revealed that there is a need of coming together to improve education by reviewing of the curriculum and teaching methodologies that allow global connectedness and fast changes in course contents, methods of delivery, and assessment in addressing issues and challenges in the society. Like any other education systems across the globe, African systems of education have been largely affected by the COVID-19 pandemic which has increased the disparities in the way education has been delivered (United Nations, 2020). In the effort to reduce the spread of the pandemic, many African governments decided to close learning institutions and teaching and learning process shifted to remote education (Kamga, 2020). The remote education was practiced in asynchronous and synchronous ways via radio, television, Zoom, WhatsApp, Email correspondences, and YouTube channels (Armstrong, Lugano, and Hawi, 2020). However, the teaching and learning using these methods faced several challenges due to the lack of planning an effective preparations. The traditional ways, rules and regulations that governed learning institutions have been slightly implemented, the examinations and tests were concealed.

Educational systems in different parts of the world have been and are different in organization and in content (Pacho, 2013). They are different partly because the societies providing the education are different, and because education, whether it be formal or informal, has a purpose. That purpose is to transmit from one generation to the next the accumulated wisdom and knowledge of the society, and to prepare the young people for their future membership of the society and their active participation in its maintenance or development (Nyerere, 1967; Pacho, 2018). To fulfil the purpose of education in the post COVID-19 pandemic, policy makers, researchers, and educators in Africa must implement more innovative ways to education. This theoretical paper discusses how the COVID-19 pandemic has shaped a unique opportunity for educational changes.

## **2. RESHAPING EDUCATION IN THE POST COVID-19 PANDEMIC IN AFRICA**

This section provides a brief description of education reforms in the post covid 19 pandemic in Africa based on the following sub-sections: Educational leadership and administration, Curriculum, Pedagogy and the Learning environment

### **2.1 Educational Leadership and Administration**

Implementing radical changes within a particular society requires a bold leadership which possess effective approaches and mind-sets to shape the future and encourage development globally (Tenuto, 2021). To enhance progression and growth of an institution and its members, the role of a leader is crucial; leadership in general is considered as one of the steppingstones for development (Rehman, Khan and Waheed, 2019). Effective leadership encompasses several managerial roles and leaders must have effective capacity of knowledge and skills to achieve the intended goals (Lopez and Ensari, 2014). Sadly, the impact of the COVID-19 pandemic has been

made worse by the absence of global coordination which has raised important questions about how to ensure the health and wellbeing of people across the world. To respond to these impact and uncertainty, the role of leaders and every citizen have a unique chance to change course and put the world on track by finding proven steps to defeat the effect of the virus.

In the school contexts, most of educational leaders in Africa have been applying transformational leadership style as a way to attract and bring changes in their learning institutions. Being committed as an ethical leader brings about positive academic excellence in schools. In some learning institutions such as schools and universities, educational leaders find it difficult, challenging and even stressing to bring or adapt changes they want in their learning contexts. Effective changes in schools and bold leadership styles are interrelated. The school leaders, policy makers, and other stakeholders in education have the responsibility to employ leadership styles which act as a catalyst for innovation and social development. This is due to the following roles that leaders play to influence changes: Leaders such as educational administrators and faculty possess a distinctive position to effectively influence teaching and learning both in physical or distance learning; Leaders act as role models for planning, guiding, managing and offering support to education institutions to influence learning and positive changes; Leaders seek to evaluate and prioritize the curriculum and contents which meet the demands for effective learning and teaching; and Its leadership which enforce the application of new technologies and conducting an applicable assessment to encourage adoption of innovative practices for learning and teaching process

In this paper, we propose that African leaders need to instil and implement integrated leadership styles which has been considered as a vital innovative factor for teaching and learning. For example, Mulford, (2008) as cited in Rehman, Khan and Waheed, (20019) noted that each single leadership style such as transformational, distributed and instructional leadership styles have their own advantages and disadvantages when compared. However, a flexible kind of leadership style, like situational leadership, partaking elements of each leadership style would be most suitable and appropriate. Comparable to that, Hallinger (2003) argued that the effectiveness of instructional leadership and transformational leadership styles are a vital force for school development. In recent times, Bahadur, Amir, Waheed and Nasir, (2017) argue that the best practices in learning institutions in Malaysia resulted by selection of the best flexible leadership styles which were adaptive and multiple in nature. The result of these flexible leadership styles indicated that the leaders were not only focusing on managerial and task practices, but also were found vital in giving valuable change, ethics and relations. Hence, the review of the literature shows that integrated leadership styles which is instructional, transformational, and moral would contribute greatly to teaching and learning success rather than using a rigid and single style.

On the other hand, as Nelson Mandela has ever said “one of the challenges of our time is to re-instil in the realisation of our people that sense of human solidarity of being in the world for one another and of and through others” (Mandela, 2006). In relation to that, there is an Ethiopian Proverb that encourage solidarity among the people. This proverb states that ‘when spider webs unite, they can tie down a lion’. The COVID-19 pandemic has strengthened these messages and

ideas more strongly than ever, hence it is time to take bold steps by belonging to each other and standing together in solving existing world and societal problems. From that standpoint, leadership is crucial because their decision will either propel action forward or be setback for sustainability. Therefore, in this paper, we encourage leaders from every country in Africa and across the world to uphold intergenerational unity and to be realistic, idealist and visionary to make sure there is a way that build meaningful life and make positive impact on the lives of people by finding innovative ways to overcome the issue and challenges facing the society now and in the future.

## 2.2 Curriculum Development

Currently, millions of people across the globe seeks knowledge of, and way forwards to the countless challenges and issue facing the education sector because of COVID-19 pandemic (Tenuto, 2021; Gul and Khilji 2020). As the world changes so quickly, traditional skills, and knowledge become outdated, and an innovative set of knowledge and skills becomes more essential (Ullah 2020). In the dynamic world, its crucial to note that even career and employability skills needs to change with time. The way people do business, teach, learn and live will not be the same due partly to advancement in technologies which has exposed a new set of knowledge and demands new set of skills. These set of innovative knowledge and skills includes critical thinking, creativity, entrepreneurship, growth of mind-sets, communication, collaboration, and global competence (Duckworth and Yeager, 2015). Therefore, it is also vital for learning institutions to reform their curriculum to respond to the issues and changes to enhance learning that liberate every individual and prepare them for the better future and for the competitive world.

As in other countries across the globe, education in African countries have been negatively affected by the so called COVID-19 pandemic (Paschal and Mkulu 2020; Armstrong, Lugano, and Hawi, (2020). As the proactive ways for education, distance teaching and learning has been initiated and practiced by many learning institutions both in African and beyond. However, the teaching and learning resources and technologies in general are limited and most of learning institutions in Africa have failed to implement distance or online education. With these challenges, COVID-19 pandemic is the stimulus for curriculum to be more proactive and responsive than it was before to ensure development of integrated curricular to permit flexibility in course contents and methods of delivery to respond to the changing and unpredictable future that the world may face. In this article, we propose for the new and responsive curriculum that will respond to the uncertainty or pandemic during the post COVID-19. Additionally, the curriculum should integrate the essentials skills of the twenty-first century to enable learners to live and work effectively in the globalised world. A twenty-first century curriculum should integrate thinking and innovation skills, information and digital literacy, and life and career skills in context across all subjects in an interdisciplinary way (Pacho, 2020). The Partnership for the 21st Century Learning (P21) has identified four essential skills (the 4Cs) for the twenty-first century: creativity, critical thinking, communication, and collaboration (Partnership for 21st Century Skills, 2008; Pacho 2020).

For human to thrive in the post COVID-19, the responsive curriculum must be prepared with the following characteristics. First, it must be proactive to influence competence to learners (Duckworth and Yeager, 2015; Wagner, 2012). A competency-based approach to curriculum development puts emphasis on the learning outcomes and less on content and its mere acquisition (Pacho 2020). Comparable to that, Ullah (2020) notes that to influence learning in this fast changing world, education should help students develop creativity, global competence and entrepreneurship skills. Moreover, the curriculum need to develop learners earn skills that will be internationally connected instead of getting a certificates. Although learning institutions can no longer utilize the traditional knowledge as a way forward to issues and challenges facing the society, the content of basic skills and its practise is still of value in human development of the African societies, but it needs to be integrated into competency-based curriculum. This will enable the curriculum to adopt a transactional or transformational approach to education and help students move from being passive recipients to active partners and participants in the teaching and learning process (Miller and Seller, 1990). Additionally, Moore (2015, p. 164-165) recommends the following features to be considered for a new and responsive curriculum:

*Active and forward looking:* This means that the curriculum should be focused on the present while valuing the past.

*Responsive:* The curriculum should respond to the changes that may occur in society and be responsible in promotion of courage to learners who wish to be change agents to solve issues and challenges

*Relevance:* The curriculum must promote relevant education to leaners and to the society around.

It should equip the learning institutions with stability that educators and learners need.

It also should allow individual development by instilling happiness and creativity

Generally, the study suggests that a responsive curriculum should allow learners to make their own choices of learning and sharing what they plan, innovate, develop or the results of what they have carried out as they examine the contents of the topic. However, the study suggests that the curriculum should identify the need of the learners, goals and objectives during the learning process to enable the teachers and students to select the contents based on the need of the learners. The study further proposes that during the preparation of the curriculum the education stakeholders should consider the mode of delivering contents, evaluating and assessing the learning process. From that standpoint, we adopt the following steps that must be taken in order to develop a proactive and responsive curriculum that may respond to the effect of uncertainty in the post pandemic. Figure 1 shows the processes to be undertaken in curriculum transformation.

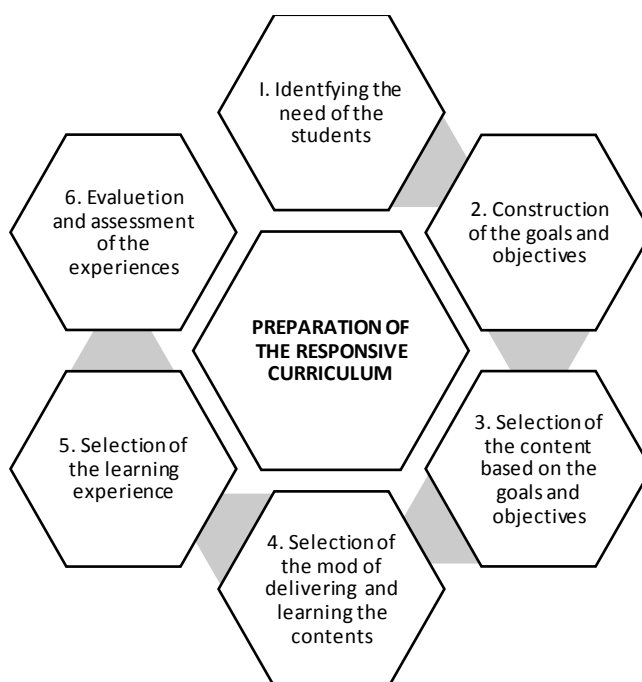


Figure 1 Processes to be undertaken in curriculum transformation

Source: Modified from Gul and Khilji (2020).

### 2.3 Pedagogy

Dewey (1916, in Pacho, 2018: 12) declares that education is not an affair of ‘telling’ and being told, but an active and constructive process. Dewey insists that students must always be involved in the learning process. From the standing point of this quote, it must be illustrious that the secret of bringing attainable change in education during crisis and post crisis time is to set efforts on inventing new teaching and learning pedagogies that help in developing knowledge for solving problems and inspiring development. Therefore, the pedagogical approaches to be promoted should be implemented in such a way that passivity in learners is replaced by inspiration to embark on constructive action to transform situations, based on open experience and careful reflection (Pacho, 2013).

Literature has shown that, to enhance social, political and economic changes in the society, the need for learning institutions to improve teaching and learning pedagogies in the world is indispensable. So far, learners are convinced to involve more actively in personalized learning. Sadly enough, teaching and learning in many African countries have been practiced under traditional teaching pedagogies which is theoretical, and examination oriented in nature. This teaching approach is dominated by traditional teaching which includes memorization, and repetition of contents being taught by a teacher (Sharma, 2018, Pacho, 2013). Besides, Damodharan and Rengarajan (2013) insists that traditional methods of teaching discourage the effectiveness of learning since it fails to meet the need of the students in the learning environment and in the society in general. The traditional and conservative approaches to

education in Africa must be transformed by pedagogies which can equip learners with relevant knowledge, skills, values and attitudes to respond appropriately to the everyday realities of the changing world (Pacho, 2013). However, it important to note that no one method is appropriate in the teaching and learning process in all contexts. Therefore, a variety of pedagogies should be applied interchangeably in varied degrees to promote creativity and development of learners (Pacho, 2013).

The ineffectiveness of traditional methods of teaching and learning has amplified the call for educators and all education stakeholders to help and encourage learners be more involved in personalized learning rather than applying banking or lecture method of learning (Kallio and Halverson, 2020). There are reasons for learners to involve in personalized learning because they come from different contexts and have different passions, interests as well as level of learning. Hence, for learners to become more active in learning, they need to learn according to their interests, passions and abilities. During the learning process students need to decide what is necessary for them to learn while a teacher will be there as a facilitator rather than a dominator of the learning process. The Confucius saying 'I hear, and I forget; I see and I believe; I do and I understand' can inspire our choices of pedagogy for enhanced retention of knowledge and application of skills. From this standpoint, learners need to learn by themselves to be creative and critical thinkers rather than gaining all the knowledge and skills from the teacher. The role of the teachers will change as well from being instructors to being facilitators of learning and coordinators of the learning resources. Teacher education needs to be more active in enabling teachers to learn more on how to care their learners as they serve as facilitators of learning and coordinators of the learning resources.

To promote the effective development of an individual, social and political economy, Pacho (2013) maintains that a good education is the one that is effective and well-organized to shape an individual's mind both spiritually and intellectually. Moreover, John Dewey (1916) also notes that 'If we teach today as we taught yesterday, we robe our children of tomorrow'. Similarly, Paolo Freire (1993) warns that when use obsolete passive pedagogical approaches to education, we run the risk of preaching in the desert.

Therefore, to improve the quality of education in African nations in the post COVID-19 pandemic, teacher-centred learning approach must be eliminated by developing learner-centred innovative approaches of learning. The innovative approaches must be relevant and emphasize innovation and active acquisition of knowledge for solving societal issues and problems to enhance social, economic and political development. According to Kapur (2016), new learning methods should focus on personalized learning as well as learner-centred learning. Furthermore, the norms of teaching and learning need to be more authentic, inquiry-based as well as purposeful with the aim of instilling desirable knowledges, skills, values and positive attitude to enable learners to be more active in solving both existing and unknown problems. For instance, the models of teaching should be used based on the environment and need of the learners. They should be used interchangeably in variety of formats such as online mode of delivery, recorded lectures, social media, Massive Open Online Courses (MOOCs) as well as voice over PowerPoint. However, during the teaching and learning process learners and other education



stakeholders must note that the effectiveness of the teaching and learning pedagogies come from the way they are applied and not from the approaches themselves as Pacho (2013). How to do it in terms of pedagogical approaches to enable learners to acquire the desirable knowledge, skills, values, and positive attitude is the most important in the teaching and learning process.

## **2.4 Learning Environment**

The social environments in which teaching and learning take place generally have an influence on how learning takes place (Pacho, 2013). Learning context plays a significance role in learning. It can hinder or influence effective teaching and learning. Boa (2014) in her study of “determinants of high academic performance in secondary schools” established that high-performing learners in secondary schools had conducive learning environment and sufficient qualified teachers who influence constructive teaching and learning to their learners. The teaching and learning environment coupled with qualified teachers in the field of education are vital in producing qualified learners who later will use their knowledge and skills to raise innovation and productivity in their country. Additionally, Montessori (2013) adds that a learning environment which is well equipped with teaching and learning resources, democracy, and constructive pedagogies is vital in helping learners acquire knowledge. Unfortunately, many countries in Africa continents are still facing a variety of challenges in offering effective and innovative education because of the poor learning contexts which is characterised with inadequate democracy, traditional teaching and learning pedagogies as well as inadequate material and human resources. For instance, in many learning institutions in developing countries in Africa failed to continue teaching and learning as a result of the COVID-19 pandemic which led to the closure of learning institutions because of lack of innovation which could help the continuation of learning. As the world tries to return to normal life, this normality will not be simply realized because of uncertainty and catastrophes which are the effects of various changes in our surroundings. Therefore, embracing and strengthening online education is vital because it can help students learn by retrieving learning resources through technology. Teaching and learning in the online mode are significant because it helps learning to take place at anytime, anywhere depending on learner’s decisions. The emergency of the COVID-19 pandemic and the experience that the world has witnessed has paved the way for education to be offered in the blended mode. To continue teaching and learning in African countries uninterrupted in the post COVID-19 pandemic, blended mode of delivery should be effectively implemented in the education.

## **3. CONCLUSION**

The outbreak of COVID-19 pandemic has made a huge impact on education globally. COVID-19 has posed serious challenges to education due to COVID-19 related school closures and its disruption to traditional face to face learner and teacher interaction. However, COVID-19 pandemic may provide unprecedented potentials for the education sector in areas such as integration of technology in education, and for distance and online learning. Teaching and learning approaches will continue to take various forms and shapes depending on the context and circumstances in the ever changing innovations. The changes on how education is offered will basically include the transformations on curriculum, pedagogy, and educational policies. Majority of learners will effectively learn for global connection and to get skills and be

competent to solving various global challenges as they arise in the dynamic world. Teaching and learning will be conducted anywhere, anytime. However, one may note that students have different learning abilities, by this means, we may say that innovation in learning is not the same. Hence, it is vital to rethink education by finding innovative and possible ways which will make the education be constructive, reasonable, critical and creative toward solving the fast changing world in the post COVID-19 pandemic society. To effectively address the educational challenges brought about by the COVID-19 and prepare for the future, education stakeholders must prepare for the future before the future itself keeps on developing. This means that education stakeholders must embrace integrated leadership styles, educational technology, online education, conducive learning environment, learner-centred pedagogies, and a responsive curriculum that addresses the changing needs of learners in different contexts. African countries must note that everyone has an idea but only few turn their ideas into actions. Let African nations be among of the few who do that by creating new innovative ideas, new environment, new tasks and new cooperation which should be applied to enhance an effective teaching and learning for the better future of the people of Africa and other countries globally.

Due to the study findings, it was therefore recommended that: In order to continue teaching and learning in African countries, blended mode of delivery should be effectively implemented in the education during the COVID-19 pandemic and in the post COVID-19 pandemic. Learning methods should focus on personalized learning as well as learner-centred learning. Furthermore, the norms of teaching and learning need to be more authentic, inquiry-based as well as purposeful with the aim of instilling desirable knowledges, skills, values and positive attitude to enable learners to be more active in solving both existing and unknown problems.

The government in African countries should put an effective effort on education which will include financing the development of technology, training teaching staff and students, strengthening the technological infrastructures which will help the development of education during the post crisis times.

The study recommends that Higher learning institutions in African countries should increase the efforts towards the preparedness for blended learning by improving, curriculum, revising educational policy, developing e-learning systems that could enhance learning in the post COVID-19 pandemic. Furthermore, the study recommends that further proposals can be developed focusing on other level of education such as nursery, primary and secondary schools.

LETTER TO *SCHOLARS, EDUCATORS, STUDENTS AND POLICYMAKERS IN AFRICA,*  
*October 23, 2021*

*Dear Scholars, Educators, Students and Policy makers,*

*Let me begin by thanking you for your time. I know every one of you is busy, and I am grateful for taking your lovely precious time to read this article. Since the onset of the coronavirus pandemic, scholars are tirelessly trying to find useful solutions to the impacts resulted by this pandemic which came up with introduction of social distancing and lockdown globally. In*

*African countries, educators, students as well as policy makers have felt these impacts acutely as they attempt to find the appropriate mechanisms that will prepare education to positively influence teaching and learning in the age of post COVID-19. As Dr. Pacho and I discuss in this article, it is vital to acknowledge that African nations like many other in the world are not in the so called 'new normal' and there will be no new normal in the future but the world will witness lots of radical changes in the education sector as well as in other industries. Therefore, in order to thrive in teaching and learning, the pandemic has given us the opportunity to rewrite, restructure and reinvent the teaching and learning methods, system of education, and to embrace the transformational that will help educators cultivate an effective responsive teaching and learning. In this article, Dr. Pacho and I have proposed for educational changes and provided a framework that I hope it's an affirming and actionable framework for the moment of constant changes in the field of Education. I hope this proposed framework will help educators, policymakers and universities to reshape the education that will positively influence teaching and learning in the age of post COVID-19. For those of us ready for reshaping education, this article is a call for a paradigm changes in reshaping education that will positively influence teaching and learning in the age of post COVID-19. I hope this framework is useful not only in reshaping education in Africa but also in other countries globally because it is a call that prepare for the future before the future it keeps on developing. Thank you and I hope that you are well and safe.*

*With critical hope and best wishes,  
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## REFERENCES

- Amstrong, O, Oduor, C., Lugano, G. and Hawi, R. (2020). *Kenya Survey Report, Corona Virus Threat, Country Response, Village awareness and Preparedness.* <https://www.nation.co.ke/oped/opinion/Covid-19-tests-self-learning-skills-of-students-today/440808-5534756-134a8bhz/index.html>.
- Bahadur, W., Amir, B., Waheed, Z., & Abdul Nasir, K. (2017). Multiple Oriented Leadership behaviour and school performance: A multiple case study. *Malaysian Online Journal of Educational Management*, 5(2), 25-41
- Batty, D. (2020). Cambridge Colleges criticised for asking students to leave over coronavirus. *The Guardian.* <https://www.theguardian.com/education/2020/mar/18/cambridge-colleges-criticised-for-asking-students-to-leave-over-coronavirus>.
- Boa, Y. P. (2014). *Factors that influence high academic performance in secondary schools in Kilimanjaro Region* (Unpublished Doctoral dissertation, The Open University of Tanzania).
- Damodharan, V. S. & Rengarajan, V. (2013). Innovative methods of teaching. National Research Council. Educational journal publication.

- Dewey, J. (1916) *Democracy and Education*. New York: Maximillian
- Duckworth, A. L., & Yeager, D.S. (2015). Measurement Matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher*, 44(4), 237-251
- Freire, P. (1993). *Pedagogy of the oppressed*. Penguin Books.
- George, M. L. (2020). Effective and Examination strategies for undergraduate learning during COVID-19 school restrictions. *Journal of Education Technology System* 0(0) 1-26
- Gul, R., & Khilji, G. (2020). Challenges and possibilities to online education amid Covid-19-outbreak in Balochistan, Pakistan. *Unpublished Manuscript*.
- Hallinger, P. (2003). Leading Educational change: Reflections on the practices of instructional and transformational leadership styles. *Cambridge Journal of Education*, 33(3), 329-352
- Kallio, J. M. & Halveson, R. (2020). Distributed leadership for personalized learning *Journal of Research on Technology in Education*, 52(3), 371- 390
- Kapur, M. (2016). Examining productive failure, productive success unproductive failure and unproductive success in learning. *Educational Psychologist*, 5(2), 285-299.
- Lopez, E. S., & Ensari, N., (2014). The effective of leadership style, organizational outcome, and gender on attributional bias towards leaders. *Journal of Leadership studies* 8(2), 19-35
- Mandela, N. R. (2006). Experience Ubuntu. Retrieved from [https://upload.wikimedia.org/wikipedia/commons/1/17/Experience\\_ubuntu.ogg](https://upload.wikimedia.org/wikipedia/commons/1/17/Experience_ubuntu.ogg).
- Montessori, M. (2013). *A critical consideration of the new pedagogy in its relation to modern science*. In D. J. Flinders & S. J. Thornton (eds), *The curriculum studies reader*. P 19-32) New York: Routledge.
- Moore, A. (2015). *Understanding the school curriculum: Theory, politics and principles*. New York, NY: Routledge.
- Mulford, B. (2008). *The leadership challenge: Improving learning in schools*. Australian Education Review: ACER Press
- Nyerere, J. K. (1967). *Education for self-reliance*. Dar es Salaam: The Information Service Division, Ministry of Information and Tourism.

- Pacho, T. (2013). *Critical and Creative Education for the new Africa*. Peter Lang. [https://www.researchgate.net/publication/280133902\\_critical\\_and\\_creative\\_education\\_for\\_the\\_new\\_africa](https://www.researchgate.net/publication/280133902_critical_and_creative_education_for_the_new_africa).
- Pacho, T. O. (2018). *Service-learning in higher education in Africa*. Cambridge Scholars Publishing.
- Pacho, T. O. (2020). Impact of globalisation on Africa and its implications to education. *Social Science, Humanities and Sustainability Research*, 1(1), 81-93. <http://dx.doi.org/10.22158/sshsr.v1n1p81>
- Partnership for 21st Century Skills. (2008). *Twenty-first century skills, education & competitiveness*. Partnership for 21st Century Skills.
- Paschal, M. J., & Mkulu D. G. (2020). Online classes during COVID-19 pandemic in higher learning institutions in Africa. *Global Research in Higher Education*. <http://dx.doi.org/10.22158/grhe.v3n3p1>
- Rehman, A. U., Khan, M. I. & Waheed, Z., (2019). School heads perceptions about their leadership styles: a Qualitative study. *Journal of Education and Educational Development*. 6(1), 138-153.
- Sharma, C. R. (2018). A comparative study of some traditional and modern methods of teaching and learning. *International Journal of Arts Management and Humanities*. 7(1) 133-120
- Sun, A., & Chen, X. (2016). Online Education and its effective practice: A research review. *Journal of Information Technology Education. Research*, 15, 157-190
- Tagoe, M. (2012). Students' perceptions on incorporating e- learning into teaching and learning at the University of Ghana. *International Journal of Education and development Information and communication and Technology*, 8(1) 1-91
- Tenuto, L. P. (2021) Teaching in a global society: Considerations for university based educational leadership programs. *Journal of Global Education and Research*, 5(1), 96-110. <http://www.doi.org/10.5038/2577-509X.5.1.1027>.
- Ullah, H., (2020). Covid-19 and Education. Unequal learning loss. *Pakistan today*, <https://pakistanoday.com.pk2020/05/07/covid-19-education-unequal-learning-loss/>
- United Nations. [UN](2020). Policy Brief: Education during the COVID-19 and beyond. *United Nations*. [https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg\\_policy\\_brief\\_covid19\\_and\\_education\\_august\\_2020.pdf](https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid19_and_education_august_2020.pdf).

Wagner, T. (2012). *Creating innovators: The making of young people who will change the world*. New York: Scribner

WHO (2020). Coronavirus diseases COVID-19 Pandemic. World Health Organizations. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>